

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: INVUE

Report Number: P139860

Luminaire Tested: **ENT-E01-LED-E1-GZW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P139860
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33649)
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENT-E01-LED-E1-GZW
Description: ENTRI LED LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - WALL GRAZER WIDE
Light Source: (21) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2784.8 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.17' x H: 0')
IES Classification: Type I - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

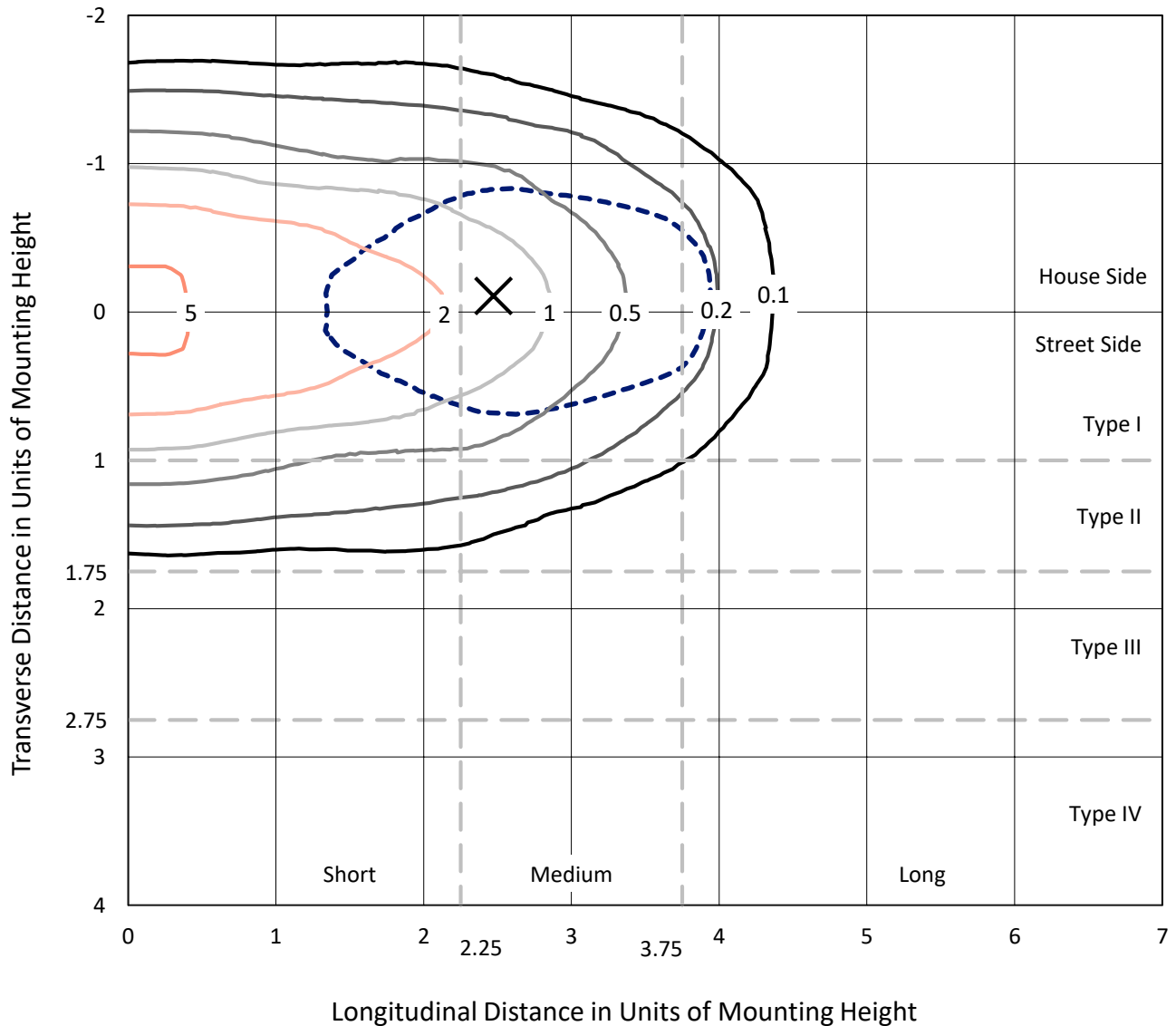


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

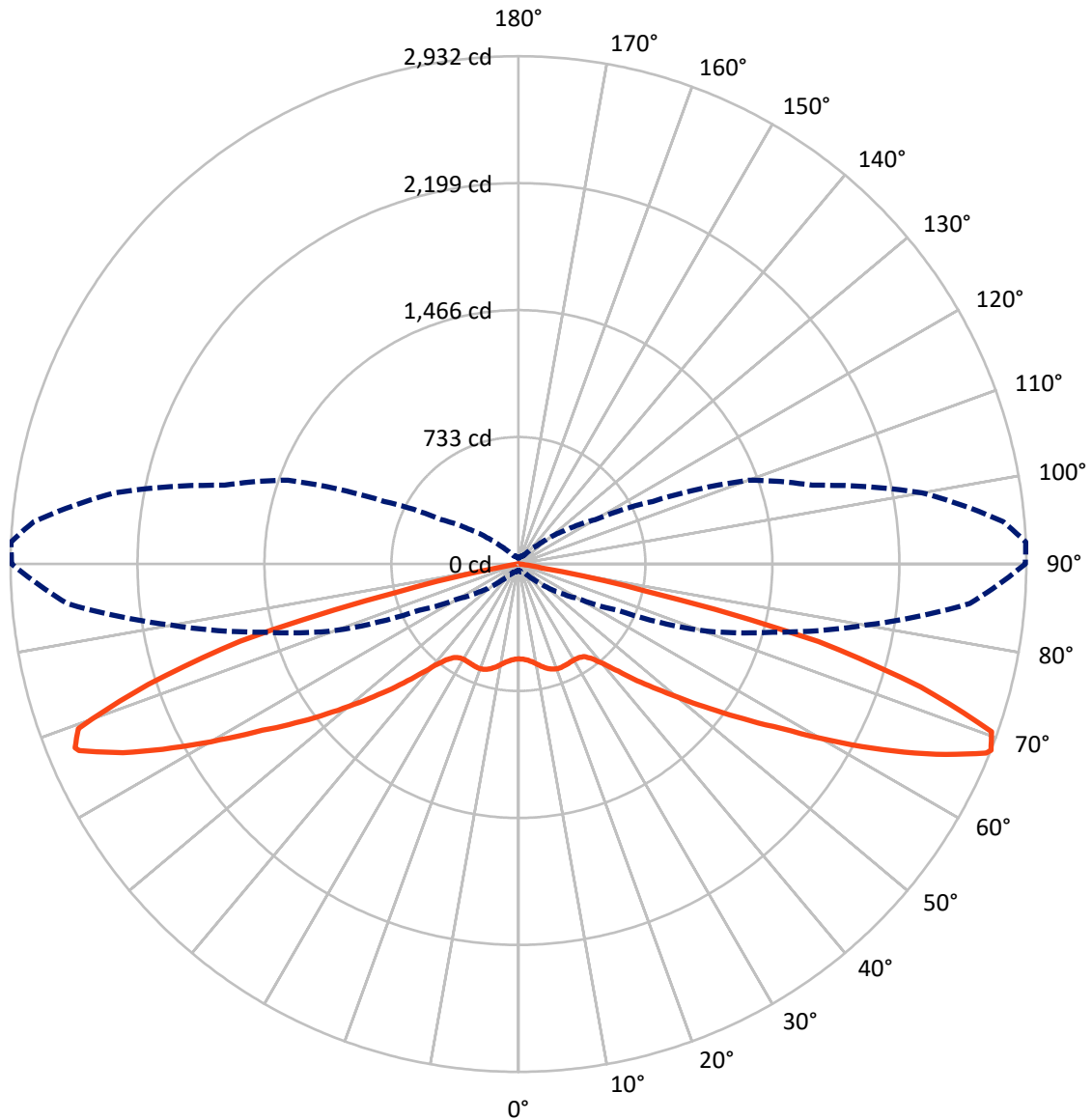


Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type I - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 92.5-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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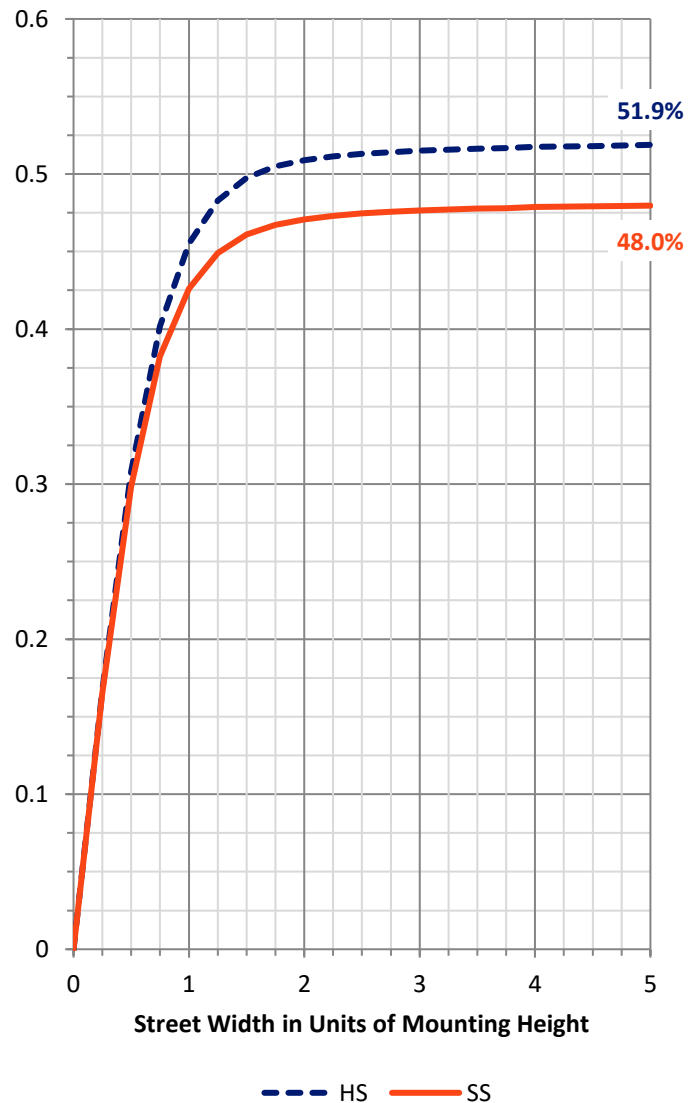
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1454.8	0.0	1454.8
	% Fixture	52.2	0.0	52.2
Street Side	Lumens	1330.0	0.0	1330.0
	% Fixture	47.8	0.0	47.8
Total	Lumens	2784.8	0.0	2784.8
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.8	1.9
10°-20°	170.3	6.1
20°-30°	276.2	9.9
30°-40°	343.3	12.3
40°-50°	426.8	15.3
50°-60°	525.0	18.9
60°-70°	620.7	22.3
70°-80°	347.6	12.5
80°-90°	21.1	0.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2784.8	100.0
0°-180°	2784.8	100.0



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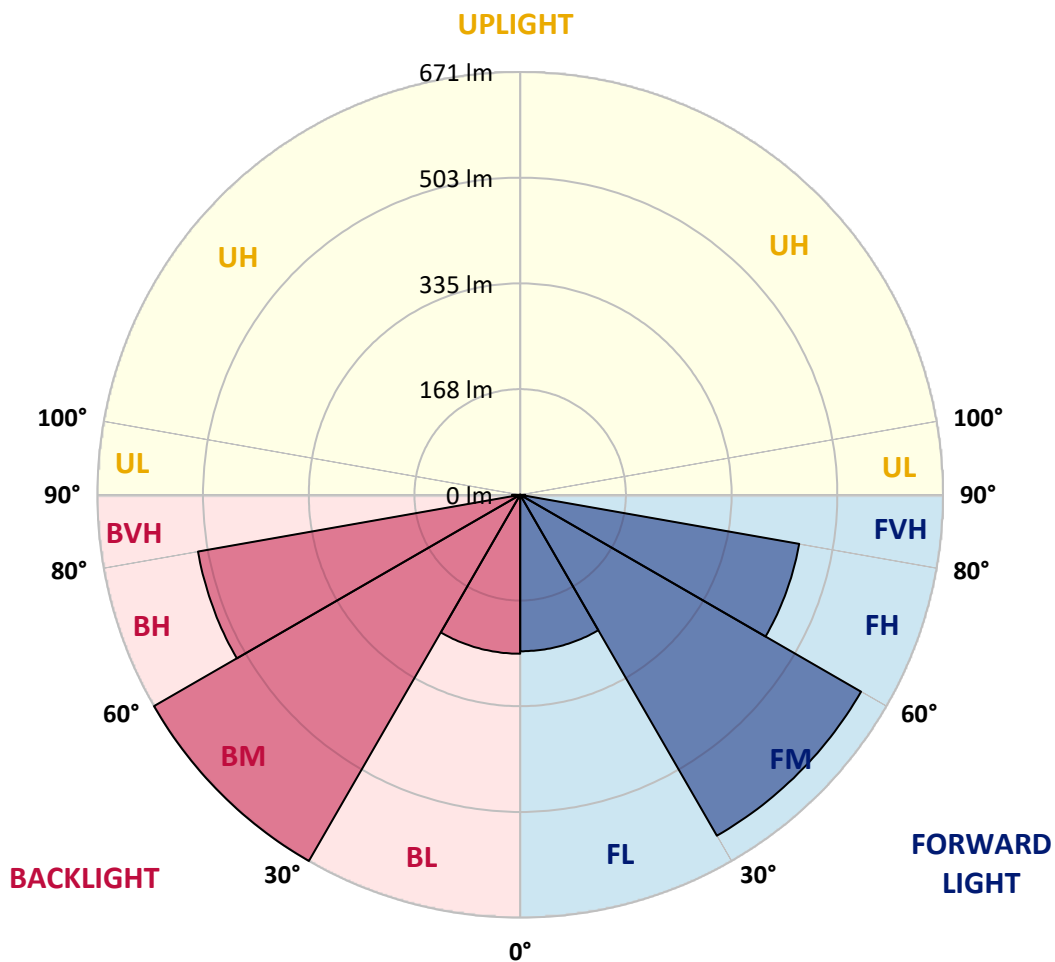
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	248.2	8.9			
FM	(30°-60°)	624.4	22.4			
FH	(60°-80°)	449.4	16.1			G0/660
FVH	(80°-90°)	8.0	0.3			G0/10
BL	(0°-30°)	252.1	9.1	B1/500		
BM	(30°-60°)	670.7	24.1	B1/1000		
BH	(60°-80°)	518.9	18.6	B2/1000		G2/1000
BVH	(80°-90°)	13.1	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5
2.5°	550.0	550.0	550.0	550.5	551.0	552.0	551.5	552.5	551.0	553.0	553.0
5°	556.5	557.0	557.5	557.5	558.5	559.0	558.5	560.0	558.5	560.5	561.0
7.5°	562.5	562.5	563.0	563.5	564.5	565.5	566.0	567.5	567.0	569.0	571.0
10°	567.0	566.5	567.0	568.0	570.5	572.0	574.0	576.0	577.0	579.0	582.0
12.5°	569.0	568.5	570.0	572.5	575.0	578.0	581.0	585.5	588.5	591.5	596.0
15°	568.0	568.0	570.0	573.0	578.0	583.5	589.0	595.0	600.5	607.0	611.5
17.5°	558.5	559.5	562.5	567.5	575.0	583.5	592.5	602.5	611.5	620.5	626.5
20°	541.5	542.5	548.0	554.0	564.0	576.5	590.5	605.0	619.0	631.0	639.5
22.5°	520.5	519.5	524.5	532.5	546.0	561.0	579.0	600.5	619.5	636.5	648.5
25°	488.0	488.0	493.5	503.5	518.0	536.5	558.5	586.0	611.5	633.5	650.5
27.5°	453.5	454.0	461.0	469.5	486.0	503.5	529.0	561.0	592.0	621.0	646.0
30°	419.0	420.5	426.5	435.0	452.5	471.0	497.0	528.5	562.0	598.0	632.0
32.5°	383.5	385.5	390.5	400.5	419.5	440.0	466.5	494.5	526.5	566.0	610.0
35°	350.0	351.5	355.5	367.5	387.0	409.0	438.5	465.5	498.0	534.5	583.0
37.5°	318.5	320.0	324.5	337.0	356.5	378.5	407.5	438.0	471.5	507.5	555.5
40°	284.5	288.0	294.0	306.0	324.0	349.0	378.5	410.5	446.0	487.0	536.0
42.5°	253.5	256.5	262.0	272.5	290.5	317.0	348.0	381.0	419.5	466.0	521.5
45°	225.0	227.5	233.0	242.5	261.5	282.5	310.5	345.0	385.0	438.5	506.0
47.5°	197.5	200.0	206.0	217.5	233.0	253.5	278.5	309.0	346.0	400.5	476.5
50°	170.0	172.5	178.5	190.0	205.0	225.0	248.0	275.5	312.0	359.0	433.5
52.5°	140.0	142.5	148.5	160.0	174.5	193.5	217.0	245.5	279.5	324.0	385.5
55°	107.5	111.0	116.5	126.0	141.5	160.5	184.0	215.0	249.5	293.0	350.0
57.5°	77.5	80.0	86.5	94.0	107.0	127.0	148.0	180.0	218.5	263.0	319.5
60°	56.5	59.0	63.5	69.5	78.5	93.0	111.5	141.5	184.0	234.0	292.0
62.5°	47.0	49.0	53.5	59.5	64.5	71.5	82.5	105.5	147.0	202.5	263.5
65°	41.5	43.0	47.0	53.0	57.0	60.0	64.5	80.0	114.0	168.5	235.5
67.5°	37.0	38.5	41.5	46.5	51.0	52.5	55.0	65.5	89.5	137.0	206.0
68°	36.5	38.0	40.5	45.0	49.5	51.0	53.5	64.0	87.0	130.5	198.0
70°	34.0	35.0	37.5	41.0	44.5	45.5	48.5	59.0	81.5	114.0	160.5
72.5°	31.0	31.5	33.0	36.0	39.5	40.0	43.0	51.5	64.0	84.0	119.5
75°	26.0	26.5	28.5	31.0	33.0	34.0	35.0	39.0	43.5	52.0	70.5
77.5°	20.0	21.0	22.5	24.0	27.0	28.0	27.0	30.0	32.0	35.5	43.0
80°	12.0	12.0	13.5	15.0	16.5	19.0	18.0	21.0	22.5	24.5	29.0
82.5°	2.0	2.5	2.5	3.5	4.5	5.5	6.0	7.5	9.5	11.5	15.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	92.5°	95°	100°
0°	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5
2.5°	550.0	551.5	551.5	551.0	551.0	551.0	549.5	550.0	550.5	552.0	550.0
5°	558.0	559.5	559.0	558.5	558.5	558.5	556.5	557.0	557.5	558.5	556.5
7.5°	568.5	570.0	570.5	570.5	570.5	571.5	568.5	568.5	569.5	570.5	567.5
10°	584.0	584.0	585.5	586.5	587.5	588.5	586.5	585.5	587.5	587.5	584.0
12.5°	598.5	599.5	602.0	604.0	604.5	606.5	606.5	606.0	607.5	607.0	603.0
15°	615.0	616.0	618.0	620.5	621.0	623.0	623.0	623.5	625.0	626.0	620.0
17.5°	630.5	632.0	632.0	632.5	633.5	635.0	636.0	636.5	638.0	639.0	633.0
20°	643.5	645.0	642.5	640.5	638.5	639.5	641.5	643.5	644.5	645.0	637.5
22.5°	653.5	654.0	650.0	644.5	639.0	638.5	641.0	644.5	645.5	645.0	634.5
25°	659.0	660.5	656.5	648.0	638.0	634.5	637.0	641.5	643.5	641.5	629.0
27.5°	659.0	664.5	662.5	653.5	640.0	630.5	632.0	639.0	640.5	638.0	623.5
30°	654.0	665.5	668.0	662.5	648.5	632.0	630.0	638.0	640.0	635.5	621.0
32.5°	644.0	665.0	675.0	675.5	664.5	644.0	634.0	642.0	643.5	638.0	626.0
35°	630.0	664.5	684.0	693.5	690.0	669.5	652.0	657.0	656.0	650.0	645.5
37.5°	614.5	664.5	697.0	719.0	727.0	716.5	693.5	691.0	693.5	684.5	682.0
40°	597.5	666.0	715.5	754.5	778.5	782.0	761.5	754.5	757.5	749.0	752.5
42.5°	587.5	668.0	740.0	796.0	842.5	878.0	869.0	848.0	846.5	847.5	855.0
45°	582.5	673.0	764.5	843.0	908.0	987.0	995.5	958.0	960.0	965.5	977.0
47.5°	577.0	682.5	793.0	892.0	979.5	1090.5	1132.0	1081.5	1077.5	1098.0	1101.5
50°	557.0	694.0	825.5	947.0	1054.5	1207.0	1272.5	1221.0	1222.0	1241.0	1234.0
52.5°	511.0	694.5	860.0	1002.0	1129.5	1322.0	1421.5	1387.5	1385.0	1403.5	1366.5
55°	447.5	663.0	888.0	1056.0	1200.5	1429.0	1575.5	1583.0	1578.0	1581.0	1501.0
57.5°	396.5	585.5	891.0	1101.5	1260.5	1530.5	1733.5	1787.5	1788.0	1775.0	1633.0
60°	363.5	498.5	852.0	1139.0	1330.5	1660.0	1939.5	2060.5	2067.5	2014.5	1809.5
62.5°	336.0	454.5	771.5	1177.5	1411.0	1791.0	2161.5	2360.5	2361.0	2272.5	2004.0
65°	314.5	430.5	683.0	1163.0	1473.0	1918.0	2396.5	2662.5	2649.5	2552.0	2188.5
67.5°	290.5	409.0	642.0	1140.5	1526.0	2035.5	2603.5	2909.0	2912.5	2792.5	2359.5
68°	285.5	401.0	631.5	1121.5	1520.0	2031.5	2614.5	2925.5	2931.5	2808.0	2367.0
70°	246.0	350.0	549.5	979.5	1412.0	1923.0	2544.5	2879.0	2897.5	2759.5	2283.5
72.5°	164.0	242.0	367.0	692.0	1088.0	1528.0	2083.0	2411.5	2427.0	2334.0	1896.5
75°	104.0	147.0	195.0	399.0	731.0	1096.5	1570.5	1762.0	1787.5	1757.0	1420.0
77.5°	63.0	103.0	120.0	193.5	385.0	513.0	709.5	722.0	751.0	733.0	736.0
80°	41.5	71.5	87.5	131.5	133.5	110.5	125.5	126.5	134.0	142.5	148.5
82.5°	23.5	43.5	61.0	90.0	79.5	41.0	35.0	36.5	37.5	38.5	45.5
85°	3.5	8.0	17.0	28.0	28.5	13.5	12.5	11.5	12.0	13.0	16.5
87.5°	0.0	0.0	0.0	0.0	0.5	1.0	1.5	1.5	1.5	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5	547.5
2.5°	549.5	549.0	549.5	548.0	549.5	549.0	549.0	549.0	548.5	549.0	549.0
5°	555.5	555.5	555.5	554.5	555.5	555.5	555.5	555.5	555.0	555.5	556.0
7.5°	567.0	567.0	566.5	565.0	566.0	566.0	565.5	564.5	563.5	564.0	563.5
10°	582.5	583.5	580.5	580.5	579.0	577.0	575.5	574.0	573.5	572.5	570.5
12.5°	601.5	601.0	597.0	595.5	594.5	590.5	587.5	586.0	584.0	581.5	578.5
15°	618.5	616.5	613.5	612.0	610.5	606.0	602.0	598.5	596.0	592.5	588.0
17.5°	630.0	628.0	626.5	626.0	626.0	622.0	618.5	614.0	608.5	602.0	594.5
20°	632.5	632.5	633.0	636.0	639.0	637.5	633.5	628.0	620.0	609.5	598.0
22.5°	629.0	631.0	635.5	643.0	649.5	650.0	646.0	638.0	624.5	609.5	592.5
25°	623.0	628.5	638.0	648.5	657.5	657.5	650.5	639.0	620.5	599.0	576.5
27.5°	620.0	631.0	644.5	655.5	661.5	658.0	645.5	629.0	603.5	576.0	550.0
30°	623.5	640.5	655.0	662.5	663.5	652.0	630.5	606.0	576.0	543.0	516.5
32.5°	636.5	657.0	668.0	669.5	662.5	641.0	607.5	573.5	540.0	509.5	482.5
35°	663.0	680.5	684.5	678.5	661.0	625.0	577.0	537.0	507.0	478.0	450.0
37.5°	706.0	714.0	706.5	689.0	656.0	605.5	549.0	510.0	478.0	449.5	418.5
40°	767.0	758.0	736.5	702.0	650.5	584.0	527.0	488.0	452.5	421.0	390.0
42.5°	843.0	811.5	767.0	717.0	644.5	570.0	511.0	466.0	427.0	392.0	359.5
45°	928.0	869.5	809.0	734.0	642.5	561.5	492.0	439.0	393.5	358.5	326.5
47.5°	1014.5	931.0	851.5	752.5	645.0	546.5	463.0	403.5	356.0	322.0	292.0
50°	1102.0	1000.0	901.0	776.5	643.5	516.0	423.5	363.0	319.0	288.5	261.5
52.5°	1190.0	1073.5	952.0	798.0	623.5	468.0	380.0	328.5	286.0	256.5	230.0
55°	1276.5	1145.0	1002.0	804.5	565.5	417.5	343.5	294.0	252.0	222.0	193.0
57.5°	1358.5	1209.5	1037.0	766.5	494.0	378.0	311.0	262.5	218.0	183.5	155.0
60°	1460.5	1271.0	1047.0	674.5	437.0	345.0	281.5	226.0	176.0	139.5	113.5
62.5°	1572.0	1354.5	1031.5	586.5	403.5	316.0	245.0	183.0	134.5	99.0	79.5
65°	1654.0	1389.0	953.0	539.5	382.5	287.5	206.0	142.0	93.0	68.0	60.5
67.5°	1763.0	1423.0	872.0	516.5	359.5	250.5	159.0	102.5	72.0	56.5	52.0
68°	1755.5	1413.5	855.0	510.5	352.5	237.5	150.0	100.5	70.0	55.0	50.5
70°	1654.0	1297.0	742.5	452.5	292.0	185.0	129.0	91.5	64.5	50.0	46.0
72.5°	1357.0	1006.0	532.5	298.0	190.0	135.5	95.5	69.0	53.5	44.0	41.0
75°	960.5	629.0	267.0	171.5	119.5	78.5	54.0	44.5	39.5	35.0	35.0
77.5°	540.0	329.0	141.0	117.5	67.5	45.5	36.0	33.5	31.0	28.5	31.5
80°	176.0	171.5	104.0	80.5	47.0	33.5	28.0	26.5	25.0	22.5	28.0
82.5°	95.0	117.5	75.0	57.5	34.5	24.0	21.0	21.5	19.5	17.5	21.0
85°	42.5	56.0	50.0	40.0	21.5	13.5	11.0	13.0	11.5	10.5	10.0
87.5°	16.5	27.5	20.0	11.5	5.0	3.0	3.0	2.5	2.0	2.0	1.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: ENT-E01-LED-E1-GZW

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	547.5	547.5	547.5	547.5	547.5
2.5°	547.5	547.5	547.0	546.5	545.5
5°	554.5	554.5	554.0	553.5	552.5
7.5°	562.0	561.5	561.0	560.5	559.5
10°	570.0	569.0	569.0	569.5	569.0
12.5°	578.0	576.5	575.0	574.5	576.0
15°	586.0	583.0	580.5	580.0	580.0
17.5°	590.5	585.5	581.0	579.5	579.5
20°	589.5	580.5	574.5	571.5	572.0
22.5°	580.0	567.5	559.5	555.5	554.0
25°	560.0	545.0	535.0	529.5	530.0
27.5°	530.0	514.0	503.0	500.0	497.0
30°	494.5	478.5	467.5	461.0	461.5
32.5°	459.5	442.0	432.0	424.5	423.5
35°	426.0	407.0	395.0	389.5	388.5
37.5°	393.0	373.0	362.0	357.0	353.5
40°	362.5	344.5	331.5	324.0	322.5
42.5°	332.5	312.0	299.0	293.5	292.0
45°	298.5	279.0	267.5	263.0	262.0
47.5°	268.0	249.5	240.0	234.0	232.0
50°	238.5	221.0	210.0	204.5	203.5
52.5°	207.5	190.0	178.5	174.0	170.0
55°	173.5	155.0	143.5	135.5	132.5
57.5°	134.0	117.5	105.5	100.0	94.5
60°	96.0	81.5	72.0	67.5	63.5
62.5°	68.0	58.5	52.5	48.0	45.5
65°	56.0	51.5	45.0	41.0	39.0
67.5°	49.5	45.0	40.0	36.5	35.0
68°	48.5	44.0	39.0	35.5	34.5
70°	44.5	40.0	35.5	33.0	32.0
72.5°	39.5	36.0	32.0	29.5	28.5
75°	34.0	30.5	28.0	26.0	24.5
77.5°	30.0	25.0	24.0	22.0	21.0
80°	25.0	22.5	20.5	19.0	18.0
82.5°	20.5	17.0	14.5	13.0	12.5
85°	11.5	10.5	8.5	6.5	6.0
87.5°	1.0	0.5	0.5	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)